



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,934	01/27/2000	Michael Routtenberg	GENH114801	1571

27076 7590 05/16/2003

DORSEY & WHITNEY LLP
INTELLECTUAL PROPERTY DEPARTMENT
SUITE 3400
1420 FIFTH AVENUE
SEATTLE, WA 98101

EXAMINER

BORISSOV, IGOR N

ART UNIT	PAPER NUMBER
----------	--------------

3629

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

SL

Office Action Summary	Application No.		Applicant(s)	
	09/492,934		ROUTTENBERG, MICHAEL	
	Examiner		Art Unit	
	Igor Borissov		3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 8-12, 14, 18-22, 25-28, 31, 33, 48-49 and 52-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Hsu et al. (US 6,380,637).

Hsu et al. teach a system and method for off-board station and an electricity exchanging arrangement suitable for use with a mobile vehicle power system, comprising:

Hsu et al. teach a system and method for off-board station and an electricity exchanging arrangement suitable for use with a mobile vehicle power system, comprising:

As per claims 1, 8, 10, 12, 33, 48-49 and 53-56,

(a) at least one station including:

(i) an external port coupled to an external port controller and a water supply (Abstract; column 2, line 28 – column 4, line 46; column 5, lines 30-39; column 8, line 66 – column 9, line 7; column 13, lines 35-44);

- (ii) an external port controller connected to an electricity supply grid
(Abstract; column 2, line 28 – column 4, line 46; column 5, lines 30-39; column 8, line 66 – column 9, line 7; column 13, lines 35-44);
- (b) an internal port mounted on a hydrogen fuel cell powered device for receiving electricity and water to be utilized by the an onboard fuel plant of the device to produce hydrogen fuel (Abstract; column 2, line 28 – column 4, line 46; column 5, lines 30-39; column 8, line 66 – column 9, line 7; column 13, lines 35-44);
- (c) an internal controller carried on the device for controlling aspects of the supply of electricity and water to the device (column 5, lines 1-11);
- (d) a connector for coupling the external port of the station to the internal port of the device for the supply of electricity and water therebetween (Abstract; column 2, line 28 – column 4, line 46; column 5, lines 30-39; column 8, line 66 – column 9, line 7; column 13, lines 35-44).

As per claims 2-5, 14, 18, 21-22, 28, 31 and 57-58, said system and method wherein the connector further includes a data link for transmitting data between the external port controller and the internal controller attendant to the supply of electricity to the device, and the station further comprises a data link for transmitting data between the external port controller and at least one electricity service provider attendant to the supply of electricity from the electricity supply grid to the external port controller and the external port (column 5, lines 1-11; column 10, lines 19-65).

As per claims 9, 19-20 and 25, said system and method, further comprising a data link for transmitting data between the external port controller and the internal controller attendant to the supply of electricity to the device, the data link transmitting data providing an identification of a specific connected device to the external port controller (column 5, lines 1-11; column 10, lines 19-65).

As per claims 11 and 52, said system and method wherein the means for delivering electricity comprises a DC to AC converter (column 4, lines 47-67).

As per claims 26-27, said system and method wherein the data transmitted over the data link to the at least one electricity service provider includes data causing a charge to be made to a financial account of the owner of a device that receives electricity from the coupled external port and a corresponding credit to be made to the account of the owner of the external port (column 10, lines 32-42; column 14, lines 8-27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7, 15 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. in view of Conrady et al. (US 5,670,860).

As per claims 6-7, 15 and 29-30, Hsu et al. teach all the limitations of claims 6-7,

Art Unit: 3629

15 and 29-30, except that an electrical conductor for transmission of electricity and a conduit for passage of water are integrated into a unitary connector.

Conrady et al. teach a system and method for high power, high frequency, liquid-cooled transmission cable and charging arrangement wherein an electrical conductor for transmission of electricity and a conduit for passage of a liquid coolant are integrated into a unitary transmission cable (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hsu et al. to include that an electrical conductor for transmission of electricity and a conduit for passage of water are integrated into a unitary connector because it would enhance the versatility of the system by allowing to employ this system for charging of electric vehicles.

Also, as per claim 30, Hsu et al. teach for the external controller, which meters the delivery of power to the device, not water. However, these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Claims 23, 32 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al.

As per claim 23, Hsu et al. teach all the limitations of claim 23, including a wide area communication network, except that the wide area communication network comprises the Internet.

It would have been an obvious matter of design choice at the time the invention was made to modify Hsu et al. to include that the wide area communication network comprises the Internet, because it appears that the claimed features do not distinguish the invention over similar features in the prior art, and the teachings of Hsu et al. would perform the invention as claimed by the applicant with any type of network.

As per claim 32, Hsu et al. teach all the limitations of claim 32, including transmitting data between the external port controller and the internal controller attendant to the supply of electricity to the device, except that the data transmitted includes a predetermined time of day at which electricity is to be supplied to the device.

It would have been an obvious matter of design choice at the time the invention was made to modify Hsu et al. to include that the data transmitted includes a predetermined time of day at which electricity is to be supplied to the device, because it appears that the claimed features do not distinguish the invention over similar features in the prior art, and the teachings of Hsu et al. would perform the invention as claimed by the applicant with supplying of electricity at any time of day.

As per claim 50, Hsu et al. teach all the limitations of claim 50, except that the electricity network comprises a local electrical network.

It would have been an obvious matter of design choice at the time the invention was made to modify Hsu et al. to include that the electricity network comprises a local

electrical network, because it appears that the claimed features do not distinguish the invention over similar features in the prior art, and the teachings of Hsu et al. would perform the invention as claimed by the applicant with any type of electricity network.

Claims 13, 16-17, 24, 34-47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. in view of Johnson et al. (US 6,047,274).

As per claims 13, 16-17, 24, 34-47 and 51, Hsu et al. teach all the limitations of claims 13, 16-17, 24, 34-47 and 51, except that at least one of the internal and external controllers participates in negotiating terms of the purchase and sale of electricity that is to be supplied to or from the device, the negotiation being carried out between at least two of one or more electricity service providers.

Johnson et al. teach a system and method for bidding for energy supply, comprising a control computer negotiating terms of the purchase and sale of electricity on behalf of users (Abstract; column 14, lines 10-37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hsu et al. to include that the controllers participate in negotiating terms of the purchase and sale of electricity, because it would allowed energy providers to facilitate management of their power generation by adjusting their bids depending on capacity utilization.

Also, as per claims 13, 16-17, 24, 34-47 and 51, Hsu et al. teach said method and system certainly capable of performing the subsequent function if so programmed. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed

Art Unit: 3629

apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (703) 305-4649.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 308-1113.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Weiss, can be reached at (703) 308- 2702.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks


Washington D.C. 20231

or faxed to:

(703) 305-7687 [Official communications; including After Final
communications labeled "Box AF"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th floor receptionist.

IR


JOHN G. WEISS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600